heavy rain and sea; St. George's channel, (7:35 a. m., Wash. mean time,) barometer 29.20, S. 59° W. gale. 16th. 51° 22′ N., 13° 43′ W., squally; 49° 39′ N., 11° 50′ W., heavy sea and rain-showers; 51° 29′ N., 11° 51′ W., (7:35 a. m., Wash. mean time,) barometer 29.20, S. 27° W. gale, increasing to whole gale and storm, with high sea-swells. 16th and 17th, 38° N.; 68° 30′ W. severe hurricane; 49° 25′ N., 18° 13′ W., strong SW. gales, heavy sea and rain; 49° 37′ N., 7° 11′ W., high W. sea; schooner Belle (from Mobile, May 4th, for Havana, dismasted in squall on 17th, abandoned on the 18th, 60 miles SSE. of Key West; 18th, 51° 26′ N., 15° 08′ W., high sea; 48° 47′ N., 25° 05′ W., high sea, heavy rain showers; 51° 35′ N., 25° 16′ W., (7.35 a. m., Wash. mean time,) barometer 29.49, N. 25° W. gale; 49° 37′ N., 12° 15′ W., SW. to W. strong gale, heavy swell and high sea. 19th, 41° 38′ N., 62° 01′ W., NE. squall; 51° 11′ N., 21° 52′ W., high sea; 40° 37′ N., 15° 53′ W., WNW., heavy gale and high sea. 23d, 51° 03′ N., 14° 22′ W., W. squally; 24th, 44° 29′ N., 62° 46′ W., (7.35 a. m., Wash. mean time,) barometer 29.80, N. 53° E. gale; 49° 15′ N., 23° 17′ W., fresh N. gale and high sea; 55° 50′ N., 16° 35′ W., N. squalls. 25th, 50° 00′ N., 20° 45′ W., NW. by W. squalls.

Ice at Sea.—March 14th, 40° N., 56° W., S. S. Borussia passed large quantity of ice. 15th, 44° 30′ N., 52° 25′ W., S. S. Fernwood saw large iceberg and got fast in a field of drift ice; steered SE. for 5 hours to get free and during the night passed 10 large icebergs, some of which were 100 ft. high; not entirely free until she reached 47° 22′ N., 47° 20′ W.

April 5th, Heath Point, Anticosti Island, Schr. Mayflower caught in ice and abandoned; during night

ice moved and vessel disappeared.

May 1st, 43° N., 54° W., iceberg 60 ft. high. 4th, vessels at Canso reported obliged to abandon voyage to Magdalen Islands owing to ice; large number of vessels icebound near Eastport, P. E. Islands. Bark Presto grounded on Chatham, N. B., bar, May 8th; at night the ice came down on her and crowded her up. 10th, 42° 49′ N., 50° W., 5:30 a. m., small iceberg 2 miles distant.

## TEMPERATURE OF THE AIR.

The isothermal lines on chart No. II show the general distribution of the temperature of the air for the month. By reference to the table in the left-hand corner of the same chart, it will be seen that the temperature over the entire country has varied but little from the normal for the month.

Minimum and Maximum Temperatures respectively: Maine—at Gardiner, 31° and 72°; Cornish, 40°, 84°. New Hampshire—Mt. Washington, 13°, 58°; Dunbarton, 26°, 84°. Vermont—Burlington, 37°, 80°; Woodstock, 32°, 86°. Massachusetts—Springfield, 37°, 81°; Bellerica, 42°, 90°. Rhode Island—Newport, 40°, 73°. Connecticut—New Haven, 36°, 80°; Colebrook, 38°, 83°. New York—Waterburg, 32°, 84°; Wappinger's Falls, 36°, 86°. New Jersey—South Orange, 36°, 84°; Vineland, 43°, 86°. Pennsylvania—Tioga, 28°, 82°; Philadelphia, 43°, 88°. De'aware—Dover, 34°, 84°. Maryland—Woodstock, 32°, 83°; Owings Mills, 37°; 80°. District of Columbia—Washington, 39°, 87°. Virginia—Snowville, 32°, 88°; Dover Mines, 39°, 92°. West Virginia—Helvetia, 34°. 82°. North Carolina—Franklin, 39°, 83°; Goldsboro, 47°, 93°. South Carolina—Aiken, 50°, 94°; Spartanburg, 51°, 92°. Georgia—Gainesville, 50°, 93°; Forsyth, 58°, 94°. Houston, 56°, 100°. Alabama—Montgomery, 52°, 94; Mobile, 55°, 98°. Mississippi—Brookhaven, 52°, 92°; Fayette, 52°, 88°. Louisiana—Point Pleasant, 55°, 88°; Algiers, 53°, 86°. Texas—Clarksville, 51°, 91°; Ferrill, 62°, 98°. Ohio—Hillsboro, 41°, 79°; College Hill, 44°, 83°. Kentucky—Danville, 42°, 81°; Bowling Green, 46°, 89°. Tennessee—McMinnville, 47°, 88°; Austin, 42°, 91°. Arkansas—Mt. Ida, 48°, 88°; Judsonia 50°, 90. Michigan—Detroit, 30°, 79°; Litchfield, 45°, 74°. Indiana—New Harmony, 40°, 84°; Laconia, 45°, 88°. Illinois—Louisville, 37°, 87°; Como, 35°, 83°. Missouri—Wet Glaze, 30°, 87°; St. Louis, 29°, 97°. Kansas—Manhattun, 33°, 85°; Independence, 48°, 90°. Wisconsin—Neillsville, 22°, 66°; Beloit, 34°, 80°. Iowa—Ames, 38°, 71; Logan, 32°, 88°. Nebraska—Clear Creek, 36°, 83°; Norfolk, 40°, 80°. Minnesota—Breckenridge, 29°, 78°; St. Anthony, 37°, 80°. Dakota—Olivet, 28°, 84°. Colorado—Denver, 32°, 87°; Ft. Lyon, 33°, 91°. Wyoming—Ft. Sanders, 10°; Cheyenne, 28°, 76°. Utah—Salt Lake City, 34°, 83°. Nevada—Winnemucca, 28°, 83°. California—Los Angeles, 47°, 89°; San Francisco, 48°, 78°; Visalia, 45°, 97°. Arizona—Yuma, 52°, 105°.

Ranges of Temperature.—The monthly ranges will appear from examination of the minima and maxima temperatures just given.

Greatest daily ranges—vary in New England from 22°, least on Mt. Washington, to 32° at Boston; Middle Atlantic States, 19° at Cape May to 34° at Fort Whipple, Va.; South Atlantic States, 17° at Cape Hatteras to 31° at Augusta; East Gulf States, 22° at Key West to 29° at St. Marks; West Gulf States, 18° at Galveston to 29° at Shreveport; Ohio valley and Tennessee, 22° at Cairo to 34° at Knoxville; Lower Lake region, 22° at Oswego to 27° at Detroit, Erie and Rochester; Upper Lake region, 20° at Chicago and Grand Haven to 36° at Marquette; Upper Mississippi valley, 26° at Dubuque to 35° at St. Paul; Lower Missouri valley, 31° at Omaha to 39° at Yankton; Minnesota and Dakota, 34° at Bismarck to 43° at Pembina; Colorado, 27° on Pike's Peak to 42° at Denver; Utah and Nevada, 30° at Salt Lake City to 42° at Winnemucca; California, 26° at San Francisco to 40° at Red Bluff.

Frosts occurred as follows: Maine—14th to 16th, (17th, injured vegetation.) New Hampshire—7th, 13th, 15th, 17th; on Mt. Washington, 5th to 18th, 20th to 30th. Vermont—7th to 9th, 14th, 15th, 17th, 18th, 24th. Massachusetts—7th, (13th, injured vegetation,) 17th. Connecticut—11th to 14th. New

York—6th, 7th, (13th to 17th, injured vegetation,) 18th, 23rd. New Jersey—11th, (13th, 14th, injured vegetation,) 16th. Pennsylvania—10th, 11th, 12th, (13th, 14th, 16th, injured vegetation,) 23rd, 29th, 31st. Delaware—(16th, injured vegetation,) 23rd. Maryland—4th, (13th, injured vegetation,) 15th and 23rd. Virginia—6th, 11th, (13th, 16th, injured vegetation.) North Carolina—5th. 6th, 10th, 11th, (16th, injured vegetation.) Indiana—6th, 11th, 12th, (13th, 15th. Ohio 5th, 6th, 8th to 12th, (13th, 16th, injured vegetation.) Indiana—6th, 11th, 12th, (13th, injured vegetation,) 14th, 15th, 27th. Illinois—4th, 9th, 10th, (11th, 12th, 13th, injured vegetation.) Michigan—4th to 6th, 10th to 17th, 28th to 30th. Wisconsin—6th, 10th, 12th, (13th, injured vegetation,) 30th. Minnesota—3d, 4th, 10th to 13th. Iowa—3d to 5th, 10th, (11th, 12th, 13th, injured vegetation,) 17th, 27th. Missouri—3d, 4th, (10th, injured vegetation,) 15th. Kansas—4th, 10th, 14th. Nebraska—3d, 4th, (10th, injured vegetation,) 12th. Dakota—1st to 15th, 21st, 27th to 29th. Wyoming—3d, 8th, 10th. Colorado—8th, 10th. Utah—7th, 8th. New Mexico—3d, 4th, 18th.

Ice is reported to have formed as follows: Dakota, at Olivet, 9th, \{\frac{1}{2}} in., 12th, \{\frac{1}{2}} in.; Bismarck, 2d, \{\frac{1}{2}} in. Missouri—10th. Nebra-ka—4th, 10th to 12th. Iowr—4th, 11th to 14th, 16th. Wis onsin—10th, 12th, 13th. Michigan—13th to 15th. Indiana—12th. Ohio—4th to 6th, 13th, 14th. Pennsylvania—12th, 13th, 14th, 16th. Virginia—16th. New Jersey—12th to 14th. New York—13th, 14th, 16th. Connicticut—12th to 16th. Massachusetts—13th, 14th. Vermont—12th, 15th. New Hampshire—13th.

## PRECIPITATION.

In General.—The general distribution of rain (and melted snow) for the month is shown on chart No. III. Fillmore City, Utah, and Kit Carson, Col., (Sun-set stations,) report 10.30 and 13.25 inches rain-fall, respectively; but these figures are probably incorrect. By reference to the table in the lower left-hand corner of the same chart it will be seen that the rain-fall for the month has been considerably above the normal in the Southwest, Lower Missouri valley, Eastern Gulf and Middle Atlantic States, and decidedly below normal in New England.

Special Heavy Rains.—2nd, Judsonia, Ark., 2.75 inches; Mt. Ida, Ark., (2nd, 3rd,) 3.35 in. 3rd, Brookhaven, Miss., 2.30 in. 5th, Wappinger's Falls, N. Y., (4th, 5th,) 2.30 in.; Ardenia, N. Y., (4th, 5th,) 2.11 in.; Wilmington, N. C., (4th, 5th,) 2.30 in.; Colebrook, Conn., (4th, 5th,) 2.30 in.; Mt. Washington, 2.87 in.; Dover Mines, Va., (4th, 5th.) 2.25 in.; Mt. Solon, Va., (4th, 5th.) 2.10 in. 8th, Point Pleasant, La., 2.06 in. 10th, Brackettville, (10th, 11th.) 3.59 in. 12th, Lawrence, Kan., (11th, 12th.) 2.05 in.; Wet Glaze, Mo., 2.00 in.; Austin, Tex., 2.80 in.; Castroville, 2.16 in.; Fredericksburg, 3.00 in. 14th, Fort Monroe, Va., 2.02 in.; Brackettville, 2.28 in.; Cape Henry, 2.27 in. 15th, Accotink, Va., (14th, 15th.) 2.00 in.; Cape Henry, (14th, 15th.) 3.02 in.; Independence, Kan., 2.08 in. 17th, New Orleans, 2.05 in.; Independence, Kan., (17th, 18th.) 2.20 in. 18th, Louisville, Ill., (18th, 19th.) 3.00 in.; Vicksburg, 2.14 in.; Corsicana, 2.35 in.; Kansas City, Mo., 2.00 in.; Wet Glaze, Mo., 2.30 in.; Fayette, Miss., (18th, 19th.) 2.50 in. 19th, Algiers, La., (19th, 20th.) 4.00 in.; New Orleans, 3.54 in.; Macon, Miss., (18th, 19th.) 2.25 in.; Deadwood, D. T., (18th, 19th.) 3.68 in. 20th, Fayetteville, N. C., 2.50 in. 21st, Goldsboro', N. C., 3.75 in.; Clarksville, Tex., (20th, 21st.) 6.50 in. 22nd, Dodge City, (21st, 22nd.) 3.30 in.; Fort Gibson, 2.52 in.; near Genoa, Neb., 2.30 in. Judsonia, Ark., (24th, 25th.) 2.25 in.; Independence, Kan., (22nd to 25th.) 4.12 in. 27th, Charleston, S. C., 3.48 in. 29th, Logan, Iowa, 2.50 in.; De Sota, Neb., 3.88 in.; Glenwood, Mills county, Iowa, 6.00 in. 30th, Hennepin, Ill., 2.90 in. 31st, Wood's Holl, (30th, 31st.) 3.53 in.; Brookhaven, N. Y., (30th, 31st.) 4.03 in.; Newport, 3.80 in.; Atlantic City, (30th, 31st.) 4.69 in.; Mystic, Conn., 2.00 in.; Lebanon, Mo., 1.44 in., (in 45 minutes;) Springfield, Mo., 3.25 in.

Largest Monthly Rain-falls.—At Glenwood, Iowa, 12.00 inches; Springfield, Mo., 11.75 in.; near Independence, Kan., 10.06 in.; Clarksville, Tex., 10.25 in.; Judsonia, Ark., 9.85 in.; Wet Glaze, Mo., 9.50 in.; Lebanon, Mo., 9.39 in.; Mt. Washington, 9.28 in; Algiers, La., 8.90 in.; Henrietta, Tex., 8.33 in.; Deadwood, Dak., 7.80 in.; Fayetteville N. C. 7.60 in., and Goldsboro, N. C., 7.50 inches.

Smallest Monthly Rain-falls.—At Florence, Tucson, Camp Grant and Yuma, in Arizona, and Monterey and Santa Barbara, Cal., none; Visalia, Cal., 0.08 in.; San Francisco, 0.16 in.; Concho, Tex., and Sacramento, Cal., 0.17 in.; Burkes, Arizona, 0.21 in.; Contoocookville, N. H., 0.30 in.; Prescott, Arizona, 0.33 in.; Umatilla, Or., 0.35 in.; and Campo, Cal., 0.41 inches.

Floods.—8th, at Riley, Ill., heavy rains, fields badly flooded, crops injured. 12th, Castroville, Tex., heavy rain storm, streams swollen damaging crops and fences. 19th. New Orleans, heavy rains, streets flooded two feet deep. Cherry Creek, Col., heaviest flood since 1864 caused by heavy rains on the divide at head of Creek, 52 miles south of Denver; all bridges (seven in number) were swept away, lower part of Denver flooded, rail roads damaged and crops and fences washed away. 21st, Denison, Tex., trains delayed by heavy rains for the past three days; track flooded and bridges washed away. 22nd., Deadwood, Dak., freshets, four houses washed away near the placer mines. The Missouri river, at Omaha, on the 25th, overflowed its banks; 26th, portion of B. & M. railroad track partly covered; 27th to 29th, flats covered in all directions; railroad tracks, along river, submerged; Omaha Smelting and Refining Works in positive danger. 29th, in southwestern Iowa, severe thunder-storm, with excessive rain, causing the Nishuabatony river to overflow its banks; bridges almost impassable; the Missouri river, in this section, arose above its banks, destroying crops on the bottom lands. 29th, De Sota, Neb., heavy rains; bridges washed away.